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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,955	08/26/2003	Tricia Susan Reighard	IP-023694	3725

1726 7590 06/20/2006

INTERNATIONAL PAPER COMPANY  
6285 TRI-RIDGE BOULEVARD  
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EXAMINER
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PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/647,955

Applicant(s)

REIGHARD ET AL.

Examiner

Marc A. Patterson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

**NEW REJECTIONS**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 29 – 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbons et al (U.S. Patent No. 4,888,222).

With regard to Claims 29 – 31, 33, and 36, Gibbons et al disclose a barrier laminate (oxygen impermeable laminate; column 4, lines 57 – 61) comprising a paperboard substrate (therefore having a first surface and second surface; column 4, lines 57 – 68), layer of polyolefin applied directly onto the second surface of the paperboard substrate (low density polyethylene; column 4, lines 67 – 68; column 5, lines 1 – 9; Figure 1), a first layer of polyamide, which is an abuse resistant polymer, applied directly onto the first surface of the paperboard substrate (abuse resistant polymer comprising nylon; column 5, lines 2 – 9; Figure 1), a first oxygen barrier layer of ethylene vinyl alcohol applied directly onto the first polyamide layer (column 5, lines 9 – 10, column 7, lines 49 – 57; Figure 1), a caulk layer applied directly on the barrier layer (column 5, lines 12 – 16; Figure 1) and a polyolefin layer applied onto the caulk layer as the innermost and product contact layer (lastly coated thereon therefore in contact with any product contained by the laminate, a layer of low density polyethylene; column 5, lines 15 – 19). Gibbons et al fail to disclose a second layer of polyamide, a first tie layer, a second oxygen barrier layer and a

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second tie layer comprising ethylene vinyl alcohol between the oxygen barrier layer and caulk layer. However, Gibbons et al disclose additional layers of abuse resistant polymer, tie layer and oxygen barrier material (column 8, lines 34 – 38) and teach the selection of the number of additional layers and the ordering of the additional layers depending on the desired specifications of the end product (column 8, lines 36 – 38). Therefore, one of ordinary skill in the art would have recognized the utility of varying the number of additional layers and the ordering of the additional layers to obtain the desired specifications. Therefore, the specifications would be readily determined by through routine optimization of the number of additional layers and the ordering of the additional layers by one having ordinary skill in the art depending on the desired use of the end product as taught by Gibbons et al.

It therefore would be obvious for one of ordinary skill in the art to vary the number of additional layers and the ordering of the additional layers in order to obtain the desired specifications, since the specifications would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Gibbons et al.

With regard to Claim 32, the first and second polyamide layers comprise nylon 6 (column 5, line 6).

With regard to Claim 34, the tie layers comprise an ethylene copolymer with a grafted functional group (column 8, lines 24 – 30); the claimed aspect of the tie layers being an ethylene based copolymer modified with maleic anhydride functional groups therefore reads on Gibbons et al.

With regard to Claim 35, as stated above, Gibbons et al disclose additional layers of abuse resistant polymer, tie layer and oxygen barrier material, and therefore also discloses an additional oxygen barrier layer comprising ethylene vinyl alcohol, which is a polyolefin, and an additional tie layer.

With regard to Claims 37 – 48, Gibbons et al disclose a container for liquid food (carton; column 1, lines 41 – 46), therefore including citrus juice, therefore a perishable product, that is sealed (column 1, lines 53 – 56), and the laminate therefore comprises a blank. The claimed aspects of the container being hot filled, to kill microorganisms, and cooling the product, and cold filled, and stored at room temperature are given little patentable weight, as the limitations are directed to intended uses of the laminate, rather than structural limitations.

#### ANSWERS TO APPLICANT'S ARGUMENTS

3. Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of Claims 29 – 48 as being unpatentable over Gibbons et al (U.S. Patent No. 4,888,222) have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 8 of the remarks dated March 15, 2006, that the first oxygen barrier layer of Gibbons et al is directly applied to the caulking layer, rather than the polyamide layer, of Gibbons et al, because Gibbons et al discloses an intervening caulk layer rather than a single layer of polyamide.

However, a single polyamide layer is not claimed; furthermore, Gibbons et al disclose a coextruded dual layer which comprises the polyamide layer and the caulking layer (column 5,

lines 4 – 10); the oxygen layer of Gibbons et al is therefore directly applied to the polyamide layer of Gibbons et al.

Applicant also argues, on page 9, that there is no Gibbons et al do not disclose a arrangement of layers such that a tie layer is directly applied to the second oxygen barrier layer. However, as stated above, one of ordinary skill in the art would have recognized the utility of varying the number of additional layers and the ordering of the additional layers to obtain the desired specifications, in the absence of unexpected results or a criticality of the ordering of the layers.

Applicant also argues on page 9 that Gibbons et al do not disclose a polyolefin layer applied to the second tie layer as the innermost and product contact layer.

However, as stated above, the innermost and product contact layer is a polyolefin layer; furthermore, because Gibbons et al disclose a second tie layer, Gibbons et al disclose an innermost and product contact layer which is applied to the second tie layer, although Gibbons et al do not disclose an innermost and product contact layer which is applied directly to the second tie layer.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson 5/30/06*

Marc A. Patterson, PhD.  
Primary Examiner  
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